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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/698,641	10/31/2003	Matthew R. Dillingham	HASO 8276US	3363

1688 7590 02/28/2005

POLSTER, LIEDER, WOODRUFF & LUCCHESI  
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ST. LOUIS, MO 63131-3615

EXAMINER
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WILLIAMS, MARK A

ART UNIT	PAPER NUMBER
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3676

DATE MAILED: 02/28/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/698,641

Applicant(s)

DILLINGHAM, MATTHEW R.

Examiner

Mark A. Williams

Art Unit

3676

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-19 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-19 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 10/31/03.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_.

## DETAILED ACTION

### *Claim Rejections - 35 USC § 112*

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 1-10, 14, and 16-19 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claims 1-10, 14, and 16-19, use of the term “behind” renders the claims indefinite since such a term is a relative term, and it is unclear exactly what constitutes such an orientation relative to other aspects of the invention.

In claim 1, lines 10-11, it is unclear exactly what is meant by “cooperating with the first pivot member obscure a region of ....the cap”. Not only does there appear to be a grammatical error, it is not clear exactly in the context of the claim how such cooperating takes place.

In claim 2, “cutouts which extend into and open out” is not fully understood.

In claims 6, 11, and 18, it is unclear in the context of the claim how the first and second pivot members have “meshing gear segments”, as claimed. Are these

the same gear segments claimed earlier? What is the functioning purpose of such segments?

In claim 10, “a cutout in the plate and gear segment” is not fully understood in the context of the claim language.

In claim 16, “the cutout of the second leaf opening into the cutout of the first leaf” is not fully understood.

In claim 16, “a first pivot member in the cutout of the jamb leaf” is not fully understood in the context of the claims.

***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1, 2, 5, 6, 9-11, 15, 16-19, as best understood, are rejected under 35 U.S.C. 103(a) as being unpatentable over Baer, US Patent 6,073,310, in view of Heidler, US Patent 3,132,911. Used in combination with a door frame having a hinge jamb and a door, Baer discloses a gear hinge for supporting the door on the door frame, said gear hinge comprising a jamb leaf mounted on the hinge jamb and

having a gear segment along one of its sides and also a cutout and a pocket (see figures 2, and 3), both of which interrupt the gear segment; a door leaf attached to the door and having a gear segment and a cutout and pocket, both of which interrupt the gear segment, as best understood, the gear segment of the second leaf meshing with the gear segment of the first leaf, the cutout of the second leaf opening into the cutout of the first leaf, the pocket of the second leaf opening into the pocket of the first leaf; a cap 24 extended over and behind the meshed gear segments to prevent the leaves from separating while enabling the hinge leaf to pivot on the jamb leaf; a bearing block 36 in the pockets to prevent the door leaf from moving longitudinally on the jamb leaf, a first pivot member in the cutout of the jamb leaf; a second pivot member in the cutout of the door leaf and configured to complement the first pivot member such that the region of the cap behind the pivot member is obscured and inaccessible.

Baer discloses the claimed invention except an electrical conductor attached to the first and second pivot members and extending through the interior of the cap, as claimed. Heidler teaches the general concept of providing a gear hinge with conductor means for transmitting current from one leaf to the other. It would have been obvious at the time the invention was made for one skilled in the art to have included in the design of Baer such a modification, as generally taught by Heidler,

for the purpose of providing a gear hinge with conductor means for transmitting current from one leaf to the other in an application where such a feature would be desirable, as known in the art.

5. Claims 3, 4, 12, and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Baer in view of Heidler. The combination does not explicitly teach the conductor being a standard wire or being within ribbon-like wire, as claimed. Such conducting connectors are known in the art for use in conjunction with hinges, as evidenced by both Suska, US Patent 4,066,857 and Ozouf et al., US Patent 5,141,446. It would have been an obvious matter of design choice to make the different portions of the conductor of whatever form or shape was desired or expedient. A change in form or shape is generally recognized as being within the level of ordinary skill in the art, absent any showing of unexpected results. *In re Dailey et al.*, 149 USPQ 47. Such a modification is not critical to the design and would have produced no unexpected results.

***Allowable Subject Matter***

6. Claims 7, 8, and 14 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mark A. Williams whose telephone number is (703) 305-3438. The examiner can normally be reached on Monday through Friday.

The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

A handwritten signature in black ink, appearing to read 'SDB', with a stylized flourish at the end.

**Suzanne Dino Barrett**  
Primary Examiner

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Mark Williams  
2/16/05

